

## CLAIMS

What is claimed is:

1. An electrohydraulic valve assembly for controlling operation of cylinder valves of a multi-cylinder engine having a manifold, the assembly comprising:
  - a plurality of electrohydraulic valves for controlling flow of a fluid within the manifold;
  - a base plate having a plurality of openings within each of which one of the plurality of electrohydraulic valves is received, wherein the openings are sized to enable the plurality of electrohydraulic valves to move along two orthogonal axes while in the openings; and
  - a bar engaging the base plate and to the plurality of electrohydraulic valves wherein the bar permits movement between the base plate and the plurality of electrohydraulic valves.
2. The electrohydraulic valve assembly as recited in claim 1 further comprising a fastener for securing the base plate to the manifold; and wherein each of the plurality of electrohydraulic valves comprises a member which immobilizes the respective electrohydraulic valve with respect to the base plate upon the fastener securing the base plate to the manifold.
3. The electrohydraulic valve assembly as recited in claim 1 further comprising a post secured to the base plate and from which the bar is cantilevered.

4. The electrohydraulic valve assembly as recited in claim 3 further comprising a plurality of electrical conductors attached to the bar, wherein the plurality of electrical conductors are connected the plurality of electrohydraulic valves.

5. The electrohydraulic valve assembly as recited in claim 4 wherein the post comprises an electrical connector having contacts connected to the plurality of electrical conductors.

6. The electrohydraulic valve assembly as recited in claim 5 wherein the plurality of electrical conductors comprises a first conductor and a second conductor coplanar with the first conductor, the second conductor having first and second sections with a gap there between, the first conductor having an arm extending through the gap, the plurality of electrical conductors further comprising a bridge extending between the first and second sections and over the arm.

7. The electrohydraulic valve assembly as recited in claim 6 wherein the bridge is connected to one end of a first U-shaped coupling which has another end connected to the first section, and the bridge is connected to a first end of a second U-shaped coupling which has second end connected to the second section.

8. The electrohydraulic valve assembly as recited in claim 3 wherein the post comprises a pin which extends through a hole in the base plate for engaging an aperture in the manifold to locate the assembly on the manifold.

9. An electrohydraulic valve assembly for controlling operation of cylinder valves of a multi-cylinder engine having a manifold, the assembly comprising:

a plurality of electrohydraulic valves to control flow of a fluid within the manifold;  
a base plate having two major surfaces with a plurality of openings there between and one of the plurality of electrohydraulic valves being received in each opening, wherein each opening is sized to enable the electrohydraulic valve received therein to move along two orthogonal axes on one major surface of the base plate; and

a lead frame having a post secured to the base plate and a bar projecting from the post and secured to each of the plurality of electrohydraulic valves, wherein the bar is flexible and enables movement of the plurality of electrohydraulic valves with respect to the base plate.

10. The electrohydraulic valve assembly as recited in claim 9 further comprising:  
a plurality of electrical conductors extending through the lead frame and being connected the plurality of electrohydraulic valves; and

an electrical connector attached to the post having contacts connected to the plurality of electrical conductors.

11. The electrohydraulic valve assembly as recited in claim 10 wherein plurality of electrical conductors comprise a first conductor and a second conductor coplanar with the first conductor, the second conductor having first and second sections with a gap there between, the first conductor having an arm extending through the gap, the plurality of electrical conductors further comprising a bridge extending between the first and second sections and over the arm.

12. The electrohydraulic valve assembly as recited in claim 11 wherein the bridge is connected to one end of a first U-shaped coupling which has another end connected to the first section, and the bridge is connected to a first end of a second U-shaped coupling which has second end connected to the second section.

13. The electrohydraulic valve assembly as recited in claim 9 wherein the post comprises a pin which extends through a hole in the base plate for engaging an aperture in the manifold to locate the assembly on the manifold.

14. The electrohydraulic valve assembly as recited in claim 9 further comprising a fastener for securing the base plate to the manifold; and wherein each of the plurality of electrohydraulic valves comprises a member which immobilizes the respective electrohydraulic valve with respect to the base plate upon the fastener securing the base plate to the manifold.

15. The electrohydraulic valve assembly as recited in claim 9 further comprising a fastener for securing the base plate to the manifold; and wherein each of the plurality of electrohydraulic valves comprises a tab which is clamped between the base plate and the manifold when the fastener secures the base plate to the manifold.

16. An electrohydraulic valve assembly for controlling operation of cylinder valves of a multi-cylinder engine having a manifold, the assembly comprising:

a plurality of electrohydraulic valves for controlling flow of a fluid within the manifold;

a base plate having two major surfaces with a plurality of openings there between and one of the plurality of electrohydraulic valves being received in each opening, wherein each opening is sized to enable the electrohydraulic valve received therein to move along two orthogonal axes on one major surface of the base plate; and

lead frame engaging the base plate and having a post from which is cantilevered a bar that is secured to each of the plurality of electrohydraulic valves, wherein the bar is flexible and enables movement of the plurality of electrohydraulic valves with respect to the base plate, a plurality of electrical conductors extending through the lead frame and being connected the plurality of electrohydraulic valves, and an electrical connector attached to the post having contacts connected to the plurality of electrical conductors.

17. The electrohydraulic valve assembly as recited in claim 16 wherein plurality of electrical conductors comprise a first conductor and a second conductor coplanar with the first conductor, the second conductor having first and second sections with a gap there between, the first conductor having an arm extending through the gap, the plurality of electrical conductors further comprising a bridge extending between the first and second sections and over the arm.

18. The electrohydraulic valve assembly as recited in claim 17 wherein the bridge is connected to one end of a first U-shaped coupling which has another end connected to the first section, and the bridge is connected to a first end of a second U-shaped coupling which has second end connected to the second section.

19. The electrohydraulic valve assembly as recited in claim 16 further comprising a fastener for securing the base plate to the manifold; and wherein each of the plurality of electrohydraulic valves comprises a member which immobilizes the respective electrohydraulic valve with respect to the base plate upon the fastener securing the base plate to the manifold.

20. The electrohydraulic valve assembly as recited in claim 16 further comprising a fastener for securing the base plate to the manifold; and wherein each of the plurality of electrohydraulic valves comprises a tab which is clamped between the base plate and the manifold when the fastener secures the base plate to the manifold.